

Evaluation to Increase Revenues

Evaluation to Increase Revenues by Outsourcing EMS Billing Operations

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Certification Statement

I hereby certify that this paper constitutes my own product, that where the language of others is set forth, quotation marks so indicate, and that appropriate credit is given where I have used the language, ideas, expressions, or writings of another.

Signed:_____

Abstract

Gwinnett County Fire Department needs to maximize current revenue streams. The purpose of this research is to examine the option of outsourcing EMS billing operations with the intent of enhancing revenues.

The evaluative research method will be employed to complete the following research questions:

1. What is the current operational state of the EMS Revenue Section?
2. What operational factors determine whether outsourcing or continued internal operations is superior?
3. What are the potential cost benefits to outsourcing the EMS Revenue Section?

The procedures and results will be determined utilizing interviews, industry and business research, and cost analysis. The recommendation extrapolated from the research is that outsourcing can enhance EMS revenues.

Introduction

Departments within a government structure compete for finite resources. Generally, the better a Department conveys the plan to deliver quality, efficient services, the more funding available to the entity. In Gwinnett County, there is a jurisdictional environment of rapid population expansion and a political environment against raising taxes. In this setting, the Fire Department is attempting to meet basic increases in service with limited resources. To secure future resources, the Department must find ways to streamline and increase revenues.

Currently, the Gwinnett County Department of Fire and Emergency Services operates an internal emergency medical services billing section. The Department cannot be sure if this is the most efficient use of resources or if revenues are maximized by this function. This research will explore options for maximizing revenues from EMS billing. The ultimate goal of this research is to determine if outsourcing this section is feasible for accomplishing the overall goal of increased revenues.

The problem is that the Gwinnett County Fire Department needs to maximize current revenue streams. The purpose of this research is to examine the options for outsourcing the EMS billing operations with the intent of enhancing revenues over current levels.

The evaluative research method will be employed to complete the project. The questions to be investigated are:

1. What is the current operational state of the EMS Revenue Section?
2. What operational factors determine whether outsourcing or continued internal operation is superior?
3. What are the potential cost benefits to outsourcing the EMS Revenue Section?

Background and Significance

The preparation for this project began with the discussion of resources and allocation when the author attended the third class of the Executive Fire Officer Program, Executive Analysis of Fire Service Operations in Emergency Management. One of the course themes was the best use of resources—at times limited—to mitigate emergencies on a community scale. This concept further built on the emphasis of the Community Risk Reduction Course taught at the National Fire Academy which emphasized how social and economic issues affected a specific community. The ultimate purpose of this project—to increase revenues from ambulance transports—is directly influenced by these course themes in that increasing recoverable revenues and improving processes will positively effect the ability of Gwinnett County to fund other emergency resources.

Gwinnett County is a county of 750,000 people spread over 437 square miles in a suburb that is located approximately twenty miles north of Atlanta. The population increases annually at a pace of approximately 24,000 citizens a year. The County does not have a dominant city—but is made up of several large jurisdictions that offer most services such as a governing body, services, and police protection and smaller cities that provide a governing body and only limited services.

Historically, the population of the County has been distributed around the cities and around the major transportation corridors—Interstates 85 and 985, and Highway 316. However, in 1997, the approval of the Special Local Option Sales Tax and subsequent renewals in 2001 and 2005 funded an aggressive road building initiative that resulted in opening rural areas of the County to new construction and increased populations. The population drift to areas previously consisting of rural farmland has presented new delivery challenges for all County services.

The economic make up of the County has changed from primarily rural, farming and light manufacturing to professional employment. Moreover, this change has brought about a dramatic shift in the citizenry make up from primarily Caucasian to a diverse mix of races--including Hispanic, Asian, and African-American citizens. This environmental change resulted in increased demands for all County services and an increased strain on the tax base including the method the County uses to fund services.

According to Alfie Meek, PhD, Economic Development Director for the County, in the early 1980s, County employment was heavily technical-manufacturing (personal communication, October 20, 2005). However, the changes in the manufacturing industry resulted in the loss of these jobs in the late 1980s (A. Meek, personal communication, October 20, 2005). The draft copy of the Gwinnett Unified Plan echoes this point by outlining the 1990s as a transition phase for the population--which is now predominantly professional with the primary occupations of management, education, health care, and scientific industry (5-12).

With the loss of manufacturing jobs, the County had a difficult time attracting business. The residential segment of the County, however, exploded. According to Meek, it cost the County around \$1.20 per unit to provide services for residential housing and 80 cents per unit to provide the same services to businesses (personal interview, October 20, 2005). Currently the make up of residential-to-business property is approximately 60:40.

This property ownership imbalance creates a taxation problem driven by State law and politics. State law requires that homeowners be advised when property is being re-valued and will incur tax increases (A. Meek, personal interview, October 20, 2005). Politically, advertising a tax increase is unpopular. To offset tax increases, the County policy is to reduce the property owner's millage rate, which holds property taxes at the same rate overall.

This policy requires that the property be sold before the County realizes any increase from revaluation of the property. Thus, the new property owner pays the new valuation tax rate (A. Meek, personal interview, October 20, 2005). Since the 1990s, the practice has resulted in a property tax decrease of 35% and a revenue loss of 64.337 million dollars (Commissioner's / Department Directors Annual Retreat, Slides 3 and 8, November 5, 2007). This practice does not account for inflation or operational expansions within the County. Overall, due to the impact of this policy, the County is unable to match future revenues to service demands.

The issues with increasing revenue for operational costs are compounded by the aggressive capital spending program funded by the Special Local Option Sales Tax (SPLOST). The Special Local Option Sales Tax is a one-cent tax levied on purchases. The tax was originally approved in 1997 and renewed in 2001 and 2005. These funds are utilized to fund road building, parks, libraries, and public safety capital projects. The funds cannot be used to pay for operational costs.

The fire department utilizes these funds to purchase replacement units, new units, equipment, and station construction. Since 1997, the Department has expanded from eighteen stations to twenty-seven. Stations twenty-eight through thirty are being funded in the current sales tax approval. The knowledge that station construction from SPLOST funding will create increased future operational costs makes it problematic for the County to fund additional construction. Current projections indicate that the County will require somewhere in the range of thirty-five to forty stations (Capabilities Report, 16).

Recently, the County attempted to identify revenue streams that will increase the ability to fund expansion projects. Current initiatives included adding storm water fees, increasing fees for current services, and hiring a collection company to increase bad debt collection. This project

will attempt to identify the components necessary to increase EMS revenue streams. The overall goal of this initiative is to increase funding that can be indirectly used for future expansion.

Gwinnett County Department of Fire and Emergency Services is a full service organization that provides fire suppression, rescue, EMS transport, fire prevention, public education and arson investigation. Operational services are provided from twenty-seven stations-including twenty-seven engines, seven trucks, two squads, twenty-one ambulances, a haz mat response unit, technical rescue units, and swift water rescue units. The Department has dedicated sections for training, fire prevention, arson investigation, and public education. The Department employs 735 dedicated men and women who respond to over sixty thousand calls a year. Of these calls, approximately eighty percent are EMS related. All personnel are cross-trained for EMS, rescue, and fire suppression functions.

The EMS Revenue Section was created in 1986 when the EMS transport service was removed from the Hospital Authority and assigned to the Department. In the program's infancy, cost recovery was not of the utmost importance because the service was primarily provided to tax paying emergency patients. The initial cost of an ambulance trip was set at fifty dollars. In the 1990s, fees were increased to one hundred dollars to discourage ambulance abuse. In 2006, the fees were increased to cover the minimum Medicare rates. Attempts to raise fees prior to the 2006 increase were defeated primarily for political reasons. The County did not want to be seen as overburdening those citizens less able pay for ambulance transport. The historic policy resulted in ambulance service fees that were the lowest in Metro Atlanta and less than the reimbursement amounts approved by Medicare and private insurance.

By 2006, the EMS Revenue Section was staffed by one supervisor, three full-time business associates, and two part-time personnel. The supervisor was experienced and

maintained a collection rate of seventy percent. The section maintained this rate for five years without an increase in staffing—even though, since 2000, the workload increased approximately ten percent a year. In 2006, this workload—coupled with the strong work ethic of the three permanent employees—contributed to a rash of stress related illnesses within the section. To combat this dysfunction, a fourth full-time associate position was approved and staffed and internal performance goals were reduced to manageable levels for the section. In late 2007, the supervisor retired and two of the business associates will retire in 2008. The remaining two business associates are tenured and are likely to stay for the near future. The two part-time personnel are from a temp agency and their level of commitment is unpredictable.

New equipment was added in 2007 that integrated the medical reports from ambulance transports with the computers in the section. Prior to this, the section was receiving paper copies of reports that were manually entered into a DOS billing database. The new system requires the employee to check the electronically transmitted data, populate the appropriate forms, and transmit the data to the designated insurance company or government agency. This change resulted in increased efficiency for the unit. In fact, the unit is now billing invoices in less than 60 days as opposed to the old standard of 120 days.

In review, Gwinnett County has a rapidly expanding population that requires expansion of current service levels. However, the current “no tax increase” fiscal situation coupled with an imbalance of residential to commercial properties puts the County in a position of inadequate funding of operating costs through property taxes. The short-term solution for this dilemma was to seek other sources of revenues—mainly from transport fees. The EMS Revenue Section historically has performed well. However, the ability to enhance revenues in the current

environment due to staff turnover, sub-market pricing, and Department expansion may make outsourcing a viable option.

This project will utilize the action research method by exploring sources from business, industry, fire service, and Gwinnett County to formulate the basis of a decision on whether outsourcing of EMS revenues to a private company can improve revenue resources currently collected by the County. The ultimate goal of this project is to improve revenues to fund future expansion of fire department operations.

Literature Review

The literature review will examine the current operational state of the EMS Revenue section. In addition the benefits of outsourcing and continued internal operations will be compared and contrasted. Finally, the potential cost benefits and/or detriments of reorganizing or outsourcing the EMS Revenue Section will be explored.

The first research question, what is the current state of the EMS revenue section, will be explored utilizing research on outsourcing billing operations in the medical industry as well as by examining the experiences of other services in regards to EMS billing operations.

One of the first considerations of outsourcing is the need to eliminate or minimize staffing. In the white paper, "Criteria for making an appropriate outsourcing selection: Insourcing, nearshore, and outsourcing", the Outsourcing Institute suggests that "outsourcing is a clever alternative to hiring" (2). In the article, "Considerations for Outsourcing Billing Operations", The Pathology Service Associates agree with the cost reduction over hiring more staff but also point out that billing operations require "strong technical expertise in both billing and information technology providers that can run the risk of costly errors" (1). In addition, the article points out that, "Even with such in-house expertise, the risk of turnover in key personnel can devastate short-term cash flow" (1). Regarding staff and service functionality, in

“Considerations for making an appropriate outsourcing selection: Insourcing, nearshore, and outsourcing”, the Outsourcing Institute states “clearly, any of these issues (concerning staffing and technical proficiency) could distract a business from its core objectives, which is why many experts advise companies to outsource work that falls outside the core business” (2). In the article, “Why companies outsource service: Opportunities and challenges”, Jeffrey T. Meyers concurs by stating, “It is a management strategy [for] an organization [to outsource] major, non-core functions to specialized, efficient service providers” (1).

The research brought to light a major caution on considering reduced costs with performance. In the article, “Considerations for outsourcing billing operations”, The Pathology Service Associates article points out that “while price is certainly important, lackluster performance can easily overshadow any price savings” (1). The Outsourcing Institute supports this argument by stating “...companies have been hurt by the unintended consequences of outsourcing primarily to control costs” (2).

The research into the experiences of other services, which have evaluated the questions of internal vs. external billing, produced several useful examples. The City of Woodbury, Minnesota’s review of its EMS billing operation recommended in Council letter No. 4 to outsource EMS billing because:

1. Contractual providers offered a higher level of service.
2. Expertise required is difficult to find and maintain.
3. Contractual providers perform the billing service at a lower cost.

The Wood River/Sawtooth EMS region published in its report, “EMS Provider Cost and Revenue”, that “[it] will be nearly impossible for each provider, with volume limits, and the pressures of other duties to maximize billing and to be compliant with Federal Law in this area”

(23). The Hermosa Beach City Council, in its analysis on providing efficient service to the community recommended, “Billing should be handled by the private ambulance company or a separate billing firm if the service is kept in-house. Both Manhattan Beach and El Segundo use a private billing company who is expert in the field, thereby increasing collections and increasing productivity by relieving staff to do other work” (2).

The second research question, what operational factors determine whether outsourcing or continued internal operation is superior, is derived from a wealth of research literature, much of which is controversial. The literature review of the second question will be limited to the advantages and disadvantages to outsourcing as opposed to continued internal operation.

The Outsourcing Institute polled user companies on why they outsourced. The answers included: a reduction of control and operating costs, improving focus, gaining access to world-class capabilities, replacing obsolete internal resources, and cash infusion (1). Jeffrey Meyers outlines in his article, “Why companies outsource services: Opportunities and challenges”, the concept of outsourcing non-core functions to specialized, efficient service providers (1). Meyers agrees with The Outsourcing Institute that a strong reason to outsource is to “Gain access to world class expertise in designing, implementing, and maintaining automation systems, and [for] keeping [up] with the latest technologies available” (2).

However, the use of outsourcing draws caution from Steve Arun in the article “Ten (10) outsourcing fears and steps to ward them off”. In the article, the competencies of the outsourcing company, the track record, and adherence to laws and regulations were outlined as factors to consider when outsourcing (1,3). In the article, “Should your city consider privatization”, David Angerer cautions that “privatization is not the answer to every municipality’s budget problems” (2). He goes on to outline that unless the outsourcing can benefit from competition, economies of

scale, or specialization, the function should not be privatized (2).

The third research question—identifying the cost benefits from re-organizing or outsourcing the EMS Revenue Section—is best answered with a cost analysis. This analysis will take place in the results section of this project. However, in this context, the literature review will examine the recommendations of the business community on potential cost benefits.

In the article, “Outsourcing: Keys to success” by the ICT Group, considerations for cost reductions must include “wages, benefits, rent or rent equivalent, telecom charges, other utilities, furniture, equipment, technology, IT resources, as well as other overhead or allocated costs” (1). The SITEL company states in the article “Top five reasons companies outsource”, that a study of the Fortune 500 found that “63 percent of respondents achieved greater than 30% annual savings” (1). The same article states that “80% of companies name cost-cutting as the main reason for outsourcing”.

Reductions in capital and technology investments were also cited as reasons why a company should outsource. In the article, “Outsourcing: Keys to success” by the ICT Group, the costs of “technology at an outsourcing firm is amortized over thousands of workstations at dozens of contact centers” (1). The article goes on to state that, “Qualified outsourcing providers utilize best-in-class technology in a cost efficient manner, allowing them to offer advanced contact center applications and tools to their clients within a competitive pricing strategy” (1).

In the article, “Are you considering outsourcing for the wrong reason?”, Ken Green explains that “If one looks only at the dollars paid for the service, and not the benefit to the bottom line, outsourcing is a mistake” (2). The ultimate decision on outsourcing or insourcing is best summed up by Yuval Lirov in his article “Electronic medical billing software and service outsourcing dilemma”. Lirov states, “abstract arguments for and against outsourced billing are

pointless as both sides may be shown right and wrong depending on specific and quantitative performance measures. Practice owners must establish objective performance and compliance criteria and use them systematically and within individual practice context when addressing the question of medical billing outsourcing” (4).

Procedures

The expected outcome of this research project was to determine if revenues from EMS transports could be enhanced by outsourcing the function. The ultimate goal of this project was to maximize revenues from the EMS transport revenue stream in order to leverage for additional funding for needed resources.

Initially, the research was centered on fees and interviews with surrounding jurisdictions about their experiences with EMS billing. During the initial contacts, it became apparent that private services were going to protect proprietary information and government services would emphasize efficiency. Little could be accomplished with private providers. However, further evaluation of the government services seemed to indicate that while efficiency was cited as the justification of outsourcing, financial information did not tend to support the argument. In fact, the real driving factor seemed based on the difficulties of managing the process in house.

The second factor—fees—became too simplistic to consider. Of course, raising fees and becoming more competitive in the market would increase revenues. However, the long-term answer would rest with improving collections processes and efficiency to increase current revenues before considering future revenue increases. When considering these two factors, the scope of the research changed.

The scope of the research instead became to complete the project with literature review and research covering the topics ranging from medical billing to outsourcing justifications to cost analysis. In order to accomplish this research the author utilized Internet resources, interviews,

internal reports and analysis, and projections/evaluations from billing companies. The basis of the project—as outlined in the background and significance—concerning the competitive environment was accomplished by personal interviews with County officials as well as documentation from meetings and presentations. These macro-environmental factors came together over the last several years to create a difficult funding situation.

Therefore, the flow of the project is to identify the economic environmental factors and establish the need for funding. Then, complete a review on the context of outsourcing as it pertains to business, medical billing, and efficiency. Finally, explore an internal review of the Department and an analysis of outside resources as applied to EMS revenue.

A limitation of this project is actual realized revenue as opposed to revenue projections. While the models utilized by resources within this report appear accurate, the actual revenue received from a private company could be lower than expected. So the major limitation to this project could be decreased revenue due to performance of the company or decreases in service. An additional limitation related to this would be changes in laws regarding the amount of revenue available from governmental or insurance sources. Changes could have either a negative or a positive effect on the projections.

Another limitation of this project that requires further research is addressing specific information technology systems that may increase efficiency of the EMS revenue operation regardless of internal or external operation. The request for proposal will have to address current information technology as it relates to billing processes. The final restraint to this project will be overall scope. While it is acknowledged that the recommendations are fairly stable in scope, changes in the political or macro-economic environment could render the study obsolete.

Results

The first research question on the operational status of the EMS Revenue Section was completed primarily by an internal evaluation. The overall costs, workload, and process evaluation were completed in order to determine the current status of the section. In order to develop an effective overview of the EMS Revenue section, the costs associated with its' processes were tabulated. The chart below outlines these operational costs.

| Cost Analysis of In-House EMS Billing | | | |
|---|----------------------|------------------|-----------------------------|
| Yearly Salaries | Salary | | Salary With Benefits |
| Supervisor | \$ 40,213.77 | | \$ 57,505.69 |
| Billing Associate | \$ 41,506.77 | | \$ 59,354.68 |
| Billing Associate | \$ 32,541.92 | | \$ 46,534.95 |
| Billing Associate | \$ 30,370.37 | | \$ 43,429.63 |
| Billing Associate | \$ 36,266.36 | | \$ 51,860.89 |
| 2 Temp. Employees | \$ 46,284.00 | | \$ 0.00 |
| Total | \$ 227,183.19 | | \$ 258,685.84 |
| Equipment | Number | Cost Each | Total |
| Billing Software Program | 1 | \$ 30,000.00 | \$ 30,000.00 |
| Computer Lease | 6 | \$ 900.00 | \$ 5,400.00 |
| Paper/Invoice/Printer Maintenance | | | \$ 15,000.00 |
| Postage Used - 2006 | | | \$ 21,292.35 |
| Total | | | \$ 71,692.35 |
| Overall Total Cost of In-house EMS Billing | | | \$ 330,378.19 |
| Projected Yearly Revenue | | | \$ 5,500,000.00 |
| Estimated Cost of In-House Billing | | | \$ 330,378.19 |
| Estimated Net Revenue | | | \$ 5,169,621.81 |

Table 1

In 2007, a new billing system was introduced. While this system did result in increased efficiency, the down time created by implementation resulted in decreased collections. Table 2 summarizes the historical activity of the section (2007 figures are estimated).

| | <u>2000</u> | <u>2001</u> | <u>2002</u> | <u>2003</u> | <u>2004</u> | <u>2005</u> | <u>2006</u> | <u>2007</u> |
|-------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| EMS Billing Technicians | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 |
| Invoices Processed | 15,277 | 17,089 | 18,032 | 19,648 | 21,448 | 24,303 | 23,379 | 27,000 |
| Total EMS Billing | \$3,819,250 | \$4,272,250 | \$4,508,000 | \$4,912,000 | \$5,372,000 | \$6,075,750 | \$6,919,856 | \$7,000,000 |
| Revenue | \$2,843,992 | \$2,914,701 | \$3,155,275 | \$3,165,399 | \$3,501,745 | \$3,839,073 | \$4,786,926 | \$5,000,000 |
| Claims Filed | 17,163 | 18,032 | 19,389 | 22,895 | 21,448 | 23,041 | 23,647 | 26,000 |
| Correspondence Handled | 4,159 | 5,360 | 5,985 | 5,293 | 6,460 | 5,460 | 7,313 | 8,000 |
| Statements Mailed | 42,374 | 42,915 | 42,319 | 37,488 | 42,277 | 43,245 | 61,504 | 65,000 |
| Accounts to Collections | 2,897 | 4,959 | 4,292 | 4,267 | 4,960 | 6,846 | 7,238 | 7,500 |
| Average Collection % | 74.46% | 68.22% | 69.99% | 64.44% | 73.53% | 67.08% | 77.42% | 60% |

Table 2

The sections' processes were identified, mapped, and evaluated for hours expended to complete operations. The current authorized positions for the section are one supervisor, four business associates and two part-time associates. Since 1999, the overall workload has increased 91% with an addition of only one staff position. From the recent process evaluation, it was identified that--in order to maintain the established processes with the current procedures--it would take seven full time personnel to satisfy the workload.

| Process | Man-Hours |
|--|------------------|
| Receiving New PCR | 10 |
| PCR Generation & Update | 80 |
| Filing Processed PCR | 30 |
| Initial Bill & Invoice Mailing | 10 |
| Customer Support | 40 |
| Posting | 40 |
| Research & Corrections | 40 |
| Filing Miscellaneous | 4 |
| Subsequent Bill & Statement Mailing | 10 |
| Reporting | 16 |
| Total Hours | 280 |
| Number of current employees: 4 full time, 2 part time, Manager assisting part time | 5.5 |
| Number of employees working 40 hr shift needed to complete current processes (280/40) | 7 |

Table 3

To summarize the current operational state of the EMS Revenue Section, the workload has greatly expanded since 2000 and so have the costs associated with this increased workload. The one number that has not increased is the personnel assigned to the section. From the processes analysis, this expansion cannot be adequately handled with the currently assigned resources.

The second research question examines the feasibility of outsourcing the billing function. To carry out this assessment, vendors from several billing companies were investigated. Then, two companies—Advanced Data Processing, Inc. (ADPI) and EMS Consultants, LTD—were contacted for interviews. Early in the meeting process, it became obvious that these EMS billing companies had more resources than the Department to handle patient accounts.

In a February 27, 2007 meeting with ADPI, the author discovered that the company could improve Department revenue by increasing collectable accounts and lowering bad debt write-offs. They would accomplish this in part through the use of superior technology and accessible resources—such as credit bureau cross-referencing. This would result in substantial decreases in write-offs due to bad addresses. Additionally, the use of specialized coders would maximize reimbursement from Medicare, Medicaid, and private insurance companies.

The author met with EMS Consultants, LTD on March 21, 2007. That meeting revealed that, through economies of scale, this specialized billing company would bring in more revenue than the Department's established system. In addition, the practice of seeking more revenue-per-call was introduced as a replacement of our current system of maintaining/increasing collection rates. The difference between the two measures is that concentrating solely on collecting rates (even with low cost outlay) is not as cost-effective as increasing the revenue-per-call. To illustrate, invoicing \$100 per call for 100 calls with a seventy percent collection rate would yield

\$7,000. In contrast, invoicing \$500 per call for 100 calls with a fifty percent collection rate would yield \$25,000.

Both companies estimated larger revenue collections than the current EMS Revenue section. ADPI estimated revenues of 1.2 million more in 2007 than the Department's estimates for the same year. This would be accomplished primarily by increasing Medicare, Medicaid, and private insurance collections and reducing private-pay and non-collectable accounts.

The third research question, "What are the potential cost benefits of outsourcing?", is based primarily on the cost comparison of increasing staff versus outsourcing the EMS billing function. The costs associated with increasing staff include adding two personnel and investing in several resources, such as credit bureau access, to make the staff more productive. The costs are estimated to be \$100,000 for two employees to maintain current processes and \$100,000 for two personnel to work delinquent accounts. Then, there is an additional \$120,000 needed to procure the technological resources to track delinquent patients and eliminate bad addresses. The total expenses of \$320,000 would be to maintain or slightly improve operations. The increased costs do not incorporate the benefits of specialized coders or the economies of scale that using the outsourcing companies would include.

After discussions with the private billing companies, both were asked to provide documentation of the process improvement leading to increased revenue projections. The intent of the request was to determine the projected increase in revenues through more efficient operations rather than merely raising fees. On October 3, 2007, Advanced Data Processing, Inc. responded to the request. Vice President of the Southeastern Division, Don Passaro illustrated through forecasting that ADPI could reduce the private payer rate while maximizing revenue through increases in collections from Medicare, Medicaid, and private insurers. In addition, the

revenue-per-call would increase from \$203.04 to \$242.76 for 2007. With fee increases in 2008, the revenue-per-call projections were \$372.22 per transport. The chart below is from the Advanced Data Processing Inc. letter dated October, 3, 2007.

| Advanced Data Processing, Inc. Analysis of EMS Revenue Gwinnett County EMS | | | | | | |
|--|---------------------|---------------------|--------------------------|------------------------|---------------------------|----------------------------|
| | FY 2006 | FY 2007 | ADPI Estimate 2007 | Proposal FY 2008 | Alternate 1 FY 2008 | Res/Out-Area FY 2008 |
| Unit Fees | | | | | | |
| BLS-EM A0429 | \$ 280.00 | \$ 310.00 | \$ 310.00 | \$ 550.00 | \$ 450.00 | \$ 410.00 |
| BLS-NE A0428 | \$ 280.00 | \$ 310.00 | \$ 310.00 | \$ 550.00 | \$ 450.00 | \$ 410.00 |
| ALS-EM A0427 | \$ 310.00 | \$ 365.00 | \$ 365.00 | \$ 650.00 | \$ 550.00 | \$ 515.00 |
| ALS -NE A0426 | \$ 310.00 | \$ 365.00 | \$ 365.00 | \$ 650.00 | \$ 550.00 | \$ 515.00 |
| ALS2-EM A0433 | \$ 310.00 | \$ 365.00 | \$ 365.00 | \$ 800.00 | \$ 700.00 | \$ 550.00 |
| Oxygen | \$ - | \$ - | \$ - | \$ - | \$ - | |
| Specialty Transport (SCT2) | \$ - | \$ - | \$ - | \$ - | \$ - | |
| TWT | \$ - | \$ - | \$ - | \$ - | \$ - | |
| Air NE | \$ - | \$ - | \$ - | \$ - | \$ - | |
| Mileage A0425 | \$ - | \$ - | \$ - | \$ 12.00 | \$ 12.00 | \$ 12.00 |
| Air Mileage | \$ - | \$ - | \$ - | \$ - | \$ - | |
| Projected Collections by Payer | | | | | | |
| Medicare | \$ 1,542,413 | \$ 1,816,487 | \$ 2,568,811 | \$ 2,769,949 | \$ 2,769,949 | \$ 2,769,949 |
| Medicare HMO/ChampusVA | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Medicaid | \$ 484,347 | \$ 526,235 | \$ 552,859 | \$ 584,656 | \$ 584,656 | \$ 584,656 |
| Insurance | \$ 1,934,695 | \$ 2,528,880 | \$ 3,187,966 | \$ 6,594,685 | \$ 5,959,075 | \$ 5,714,084 |
| Private Pay | \$ 596,768 | \$ 622,698 | \$ 390,894 | \$ 858,854 | \$ 769,436 | \$ 734,970 |
| | \$ 4,558,223 | \$ 5,494,301 | \$ 6,700,530 | \$ 10,808,145 | \$ 10,083,117 | \$ 9,803,660 |
| | \$ 177.20 | \$ 203.04 | \$ 242.76 | \$ 372.22 | \$ 347.25 | \$ 337.63 |

Table 4

With revenue estimates of ten million in 2008, the cost analysis was completed. If the EMS billing industry standard rate of seven percent is used as a measure, the overall expense for operations would be approximately \$700,000 for FY 2008. The chart below summarizes the fiscal difference between insourcing and outsourcing the EMS Revenue section. The projections

| 2008 EMS Revenue Estimate Comparisons | | | |
|--|---------------------|--------------------|----------------------|
| | Gross Revenue | Costs | Net Revenue |
| Insourced | \$7,000,000 | \$650,000 | \$6,350,000 |
| Outsourced | \$10,000,000 | \$1,030,000 | \$8,970,000 |
| Projected Loss of Net Revenue from Continued Insourcing | | | (\$2,620,000) |

Table 5

for Gwinnett for 2008 are set at 7 million to account for fee increases and call volume increases. In addition, the \$320,000 established earlier for increased staffing in the EMS Revenue section is

included. Because the current EMS Revenue section personnel can be placed elsewhere within the organization, the costs for the section are also included in outsourcing along with the company fee. Despite these costs, the County would realize a projected net revenue improvement of 2.6 million dollars by outsourcing. Stated differently, continued insourcing of operations in the EMS Revenue section—with the needed personnel and technology upgrades—would generate a net loss of 2.6 million dollars over outsourcing.

Discussion

When considering the literature review and the research findings, the positions tend to match. In the article, “Should your city consider privatization: A short primer on the ins and outs of outsourcing”, David Angerer sums up the literature review findings, which strongly discourage focusing only on cost savings when considering outsourcing. Angerer states, “By outsourcing part or all of any given public service, the local government hopes to harness the price regulating forces of the free market, namely; competition, economies of scale, and specialization” (2). In other words, there is more to be gained from outsourcing than cost savings alone.

The most compelling piece of the research indicated the differentiation between core functions and non-core functions for the fire department. The mission of the Gwinnett County Department of Fire and Emergency Services is “Saving lives and property”. Based on this mission, is the function and maintenance of a world class billing department a core competency? The macroeconomic environment of Gwinnett County is: rapid population growth, service demands, and aversion to tax increases. Funding a billing section with the appropriate resources for efficiency and effectiveness is problematic. The most convincing argument for outsourcing is that EMS billing is not a core function of the Department.

From a cost standpoint, it is improbable that the Department could provide state-of-the-art information technology and resources to identify accurate patient billing addresses comparable to those of the specialized billing companies. These companies have the ability to secure these resources due to the sheer volume of their operations. Moreover, the use of these resources employees specializing in areas such as coding, insurance reimbursement, and patient research will maximize revenues. In contrast, the Department's billing operation consists of generalists who must function in multiple areas.

The final component of the discussion is fee structure. The current fee structure for the Department is below market standard for the southeast. Any new contract with an outside provider must have a method to raise fees. However, as several of the authors in the research indicated, the decision to outsource needs to be based on more than the ability to collect larger fees. The collection of increased fees can be accomplished in-house. Outsourcing, on the other hand—when correctly performed—will increase revenues due to more efficient operations.

One of the major surprises in the research was the lack of information based on revenue enhancements for outsourcing EMS billing operations. One of the first methods of this research project was to poll individual departments on the revenue benefits of outsourcing. In the early stages, it became clear that private ambulance companies did not want to share trade secrets and government providers claimed to have better operations in-house. However, after further consultation, it became apparent that the “headache” of in-house billing operations far outweighed revenue considerations. For this reason, the original scope of the research had to be more global in nature.

Another surprising finding was the overwhelming opinion to outsource billing operations in the industry. While research identified several short-comings of outsourcing billing

operations, articles always included the criteria to justify outsourcing. According to the research, most billing operations--considering the costs of information technology and specialized resources, along with economies of scale—are suitable for outsourcing.

This research project did benefit the author's organization tremendously. It is easy to get caught up in the preconceived notion that your operation is outstanding and outside assistance is not needed. In the circumstance of Gwinnett County, the current EMS Revenue section is outstanding for the resources that they have. However, this research created a clear picture of the benefits to revenue streams that can be realized from outsourcing.

From the macro viewpoint, the increase in revenues will provide some justification and funding for expanded resources in the Gwinnett County operating environment. From a political and financial standpoint, an estimated net loss of 2.6 million dollars from continuing operations in-house would be irresponsible to say the least.

Recommendations

The goal of this research project was to determine how revenues could be increased from EMS transports by Gwinnett County. After considering the macro economic environment and cost analysis specific to Gwinnett County, and the literature review on the outsourcing subject, the following recommendations are in order.

1. Prepare a request for proposal (RFP) for outsourcing EMS billing operations.
2. Specifically, the RFP will require:
 - a. The revenue per transport performance measure desired by the County.
 - b. The fee structure required to achieve the goal.
 - c. The associated costs—in full—that the County will incur to convert to the outsourcing company.

3. One criterion for awarding the RFP should be the most efficient mix of fee structures and revenues-per-call as a measure of process performance.
4. Revenues-minus-fees (of the outsourcing company) must exceed revenues-minus-employee costs (as in the current operation).

The primary goal of this research was to increase EMS transport revenue streams to fund future programs within the fire department. From projections, net revenues will increase by several million dollars. Since the annual operating costs for personnel and associated costs (such as fuel) for a station or personnel to staff a truck will cost approximately a million dollars a year, the increase in revenue will allow for leverage in the budget process.

A secondary benefit to outsourcing is the ability to use the existing section's personnel in other areas of operations. As illustrated earlier, these personnel costs can be absorbed in the increased net revenue from the billing company. By retaining the current personnel, the subject of outsourcing should be met with less anxiety about job loss—both within the Department and the County. Overall the efficiency of the organization will improve by placing these employees in different areas of the organization.

The major follow-up to the recommendation will be monitoring the outsourcing company to ensure compliance with revenue. As noted earlier in this study, it will be easy to distance the organization from the “headaches” of maintaining the EMS Revenue section and—thus--not demanding maximization of revenue streams. Even after the bid is awarded, constant follow-up will be required to ensure compliance.

In conclusion, the broad spectrum of cost recovery from an industry and business standpoint should always be considered when researching the feasibility of outsourcing. Additionally, future studies could capitalize on efficiencies in information technology that could

potentially reduce cycle times and maximize revenues. Finally, future researchers should consider other areas within the fire service—such as fire prevention fees and response fees—as potential sources to maximize needed revenue.

The Gwinnett County Department of Fire and Emergency services serves a rapidly growing citizen base with increasing service demands. Overall, the environment is averse to property tax increases—the County’s primary funding source for operating costs. In this environment, the Department must evaluate methods to improve revenue streams. The research indicates that outsourcing EMS billing operations will increase revenue streams due to more efficient operations. Revenue increases can be used as leverage to fund services.

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